

AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of the claims in this application.

Listing of Claims:

1. (Currently Amended) A method to operate a dual mode multi-timeslot RF transmitter, comprising:

prior to a first timeslot, setting a plurality of control signals for the RF transmitter in accordance with a first modulation format used during the first timeslot; and

during a guard period between the first timeslot and a next, temporally adjacent timeslot, setting the plurality of control signals for the RF transmitter in accordance with a second modulation format used during the second timeslot, where the first modulation format differs from the second modulation format, where one of the plurality of control signals sets a power amplifier mode of operation, and where the mode of operation is one of a variable gain power amplifier and a fixed gain power amplifier.

2. (Original) A method as in claim 1, where one of the plurality of control signals is coupled to an RF attenuator having an output that is coupled to an input of a power amplifier.

3. (Original) A method as in claim 1, where one of the plurality of control signals sets a power amplifier quiescent current.

4. (Original) A method as in claim 1, where at least one of the plurality of control signals controls power amplifier gain.

5. Cancelled

6. Cancelled

7. (Original) A method as in claim 1, where one of the modulation formats operates with a variable gain power amplifier and the other of the modulation formats operates with a fixed gain power amplifier, where one of the plurality of control signals sets the power amplifier gain and is ramped during the guard period.

8. (Original) A method as in claim 1, where one of the modulation formats is 8-PSK, and where the other of the modulation formats is GMSK.

9. (Currently Amended) A dual mode multi-timeslot RF transmitter, comprising:

a programmable power amplifier; and

a multi-timeslot control unit outputting control signals to said programmable power amplifier, said control unit operating, prior to a first timeslot, for setting a plurality of control signals for the RF transmitter in accordance with a first modulation format used during the first timeslot and, during a guard period between the first timeslot and a next, temporally adjacent timeslot, for setting the plurality of control signals for the RF transmitter in accordance with a second modulation format used during the second timeslot, where the first modulation format differs from the second modulation format, where one of the plurality of control signals sets a power amplifier mode of operation, and where the mode of operation is one of variable gain and fixed gain.

10. (Original) A dual mode multi-timeslot RF transmitter as in claim 9, where one of the plurality of control signals is coupled to an RF attenuator having an output that is coupled to an input of said power amplifier.

11. (Original) A dual mode multi-timeslot RF transmitter as in claim 9, where one of the plurality of control signals sets a power amplifier quiescent current.

12. (Original) A dual mode multi-timeslot RF transmitter as in claim 9, where at least one of the plurality of control signals controls the gain of the power amplifier.

13. Cancelled

14. Cancelled

15. (Original) A dual mode multi-timeslot RF transmitter as in claim 9, where one of the modulation formats operates with the power amplifier in a variable gain mode and the other of the modulation formats operates with the power amplifier in a fixed gain mode, where one of the plurality of control signals sets the power amplifier gain mode and is ramped by said control unit during the guard period.

16. (Original) A dual mode multi-timeslot RF transmitter as in claim 9, where one of the modulation formats is 8-PSK, and where the other of the modulation formats is GMSK.

17. (Original) A method to operate a dual mode EDGE RF transmitter, comprising:

prior to a first timeslot, setting a plurality of control signals for the RF transmitter in accordance with a first modulation format used during a first timeslot; and

during a guard period between the first timeslot and a next, temporally adjacent timeslot, setting the plurality of control signals for the RF transmitter in accordance with a second modulation format used during the second timeslot, where one of the modulation formats is 8-PSK using a power amplifier in a fixed gain mode and where the other of the modulation formats is GMSK using the power amplifier in a variable gain mode, where one of the plurality of control signals sets the power amplifier gain and is ramped during the guard period, and where another one of the plurality of control signals sets the power amplifier quiescent current.

18. (Original) A method as in claim 17, where one of the plurality of control signals is coupled

to an RF attenuator having an output that is coupled to an input of the power amplifier.

19. (Original) A method as in claim 17, where the control signal that sets the power amplifier gain is ramped between a base level and a controlling level during the guard period.

20. (New) A computer program product embodied on a computer readable medium the execution of which operates a dual mode multi-timeslot RF transmitter, comprising operations of:

prior to a first timeslot, setting a plurality of control signals for the RF transmitter in accordance with a first modulation format used during the first timeslot; and

during a guard period between the first timeslot and a next, temporally adjacent timeslot, setting the plurality of control signals for the RF transmitter in accordance with a second modulation format used during the second timeslot, where the first modulation format differs from the second modulation format, where one of the plurality of control signals sets a power amplifier mode of operation, and where the mode of operation is one of a variable gain power amplifier and a fixed gain power amplifier.

21. (New) A computer program product as in claim 20, where one of the plurality of control signals is coupled to an RF attenuator having an output that is coupled to an input of a power amplifier.

22. (New) A computer program product as in claim 20, where one of the plurality of control signals sets a power amplifier quiescent current.

23. (New) A computer program product as in claim 20, where at least one of the plurality of control signals controls power amplifier gain.

24. (New) A computer program product as in claim 20, where one of the modulation formats operates with a variable gain power amplifier and the other of the modulation formats operates

with a fixed gain power amplifier, where one of the plurality of control signals sets the power amplifier gain and is ramped during the guard period.

25. (New) A computer program product as in claim 20, where one of the modulation formats is 8-PSK, and where the other of the modulation formats is GMSK.

26. (New) An electronic device for operation in a wireless communication system, comprising a dual mode multi-timeslot RF transmitter comprising a programmable power amplifier and a control unit outputting control signals to said programmable power amplifier, said control unit operating, prior to a first timeslot, for setting a plurality of control signals for the RF transmitter in accordance with a first modulation format used during the first timeslot and, during a guard period between the first timeslot and a next, temporally adjacent timeslot, for setting the plurality of control signals for the RF transmitter in accordance with a second modulation format used during the second timeslot, where the first modulation format differs from the second modulation format, where one of the plurality of control signals sets a programmable power amplifier mode of operation, and where the mode of operation is one of variable gain and fixed gain.

27. (New) An electronic device as in claim 26, where one of the plurality of control signals is coupled to an RF attenuator having an output that is coupled to an input of the programmable power amplifier.

28. (New) An electronic device as in claim 26, where one of the plurality of control signals sets a quiescent current of the programmable power amplifier.

29. (New) An electronic device as in claim 26, where at least one of the plurality of control signals controls the gain of the programmable power amplifier.

30. (New) An electronic device as in claim 26, where one of the modulation formats operates with the programmable power amplifier in a variable gain mode and the other of the modulation formats operates with the programmable power amplifier in a fixed gain mode, where one of the

plurality of control signals sets the programmable power amplifier gain mode and is ramped by said control unit during the guard period.

31. (New) An electronic device as in claim 26, where one of the modulation formats is 8-PSK, and where the other of the modulation formats is GMSK.

32. (New) An RF transmitter comprising programmable power amplifier means and control means for outputting control signals to said programmable power amplifier means, said control means operating, prior to a first timeslot, for setting a plurality of control signals for the RF transmitter in accordance with a first modulation format used during the first timeslot and, during a guard period between the first timeslot and a next, temporally adjacent timeslot, for setting the plurality of control signals for the RF transmitter in accordance with a second modulation format used during the second timeslot, where the first modulation format differs from the second modulation format, where one of the plurality of control signals sets a mode of operation of the programmable power amplifier means, and where the mode of operation is one of variable gain and fixed gain.

33. (New) An RF transmitter as in claim 32, where one of the plurality of control signals is coupled to RF attenuator means having an output that is coupled to an input of the programmable power amplifier means, where one of the plurality of control signals sets a quiescent current of the programmable power amplifier means, and where at least one of the plurality of control signals controls the gain of the programmable power amplifier means.

34. (New) An RF transmitter as in claim 32, where one of the modulation formats operates with the programmable power amplifier means in a variable gain mode and the other of the modulation formats operates with the programmable power amplifier means in a fixed gain mode, where one of the plurality of control signals sets the gain mode of the programmable power amplifier means and is ramped by the control means during the guard period.

S.N.: 10/656,403
Art Unit: 2634

35. (New) An RF transmitter as in claim 32, where one of the modulation formats is 8-PSK, and where the other of the modulation formats is GMSK.